Kreutzer, R. (1991). McFarland Child Health Screening Project, California Department of Health Services, Environmental Epidemiology and Toxicology Section.

EXECUTIVE SUMMARY

The McFarland Child Health Screening Project was conducted by the California Department of Health Services in response to community concerns about adverse child health conditions in McFarland, California, where a cancer cluster investigation has gained national attention. It was designed to: identify and refer children with suspected health problems, including cancer; assess the health status and health care needs of McFarland children; document issues of medical care access and utilization; and collect information on concern about environmental problems and their relationship to cancer. The screening was conducted in McFarland between January and April of 1989. More than 90 percent of McFarland's eligible children, 1,717 children age 1 through 12, were screened.

The general health screening include: parental interview; child interview (if older than six years); physical examination; neurobehavioral examination; laboratory assessment of urine and blood; and the Achenbach Child Behavior Checklist. A panel of physicians reviewed the information on each child and determined the need for additional follow-up. Seventy-one percent (1,238) were referred for follow-up care. The three most common reasons for referral were vision problems, dental problems and anemia. Letters were sent to the families of each child informing them of the findings of the review. Later, a survey was conducted to evaluate the impact of the screening project.

The data show that many McFarland residents have difficulty obtaining needed health care. Forty-four percent of McFarland families were not covered by health insurance, and an additional 21 percent were on Medi-Cal. Low per capita annual income (\$4,305) along with inadequate insurance make the cost of health care a nearly insurmountable barrier. Since the community's financial base cannot sustain a sufficient supply of private physicians, there is a long history of physician shortages in McFarland. Parents of the screened children (especially those on Medi-Cal) must travel longer distances to obtain medical care. Many report cost, long waiting times at the doctor's office, transportation difficulties, lack of child care facilities, and language differences as barriers to medical care.

Measures of health status reflect the effects of these barriers. Untreated tooth decay was found in all ages but appeared to be inversely proportional to income. Over 36 percent of the children had no evidence of ever having seen a dentist. A substantial percent of children (22 percent) had low hemoglobin or hematocrit (anemia). Mean hemoglobin and hematocrit values for McFarland's Hispanic children were lower than a national sample of Hispanic children (HHANES). A larger percent of McFarland pre-school children had incomplete immunizations, especially measles, mumps and rubella, and oral polio vaccine; compared with a sample of California's 1989 kindergarten population.

Several recommendations can be made based on the study results to date:

- ! Greater outreach is needed from child health programs that already exist in the McFarland area.
- ! Additional attention to dental health and nutritional educations in the McFarland

- area is needed.
- ! McFarland should consider fluoridation of the public water supply.
- ! Increasing Medi-Cal enrollment can partially address the lack of insurance coverage in the area.
- Private insurers should be encouraged to provide coverage for well child and preventive care.

The screening project with its high response rate represents one of the few community-wide child health assessments for an agricultural community anywhere in the Untied States. It offered an opportunity to obtain reliable information of broader application on the child health status and health care needs of a San Joaquin Valley agricultural town. The findings have important policy implications for State and County services related to immunizations, dental care, childhood nutrition, and access to care. The large data set offers numerous opportunities for further analysis.